What is claimed is:

1. A flexible surgical device, comprising:

a) a flexible outer tubular member having proximal and distal ends;

b) a flexible advancing element extending through said tubular member and having proximal and distal ends; and

c) a handle coupled to said flexible outer tubular member and to said flexible clip-advancing element and adapted to move said advancing element distally relative to said tubular member, wherein said flexible advancing element, said tubular member, and said handle are adapted such that said handle can cause said advancing element to provide a distal pushing force of at least 500 grams at said distal end of said advancing element.

2. A flexible surgical device according to claim 1, wherein:

said advancing element provides a distal pushing force of at least 1000 grams at said distal end of said advancing element.

3. A flexible surgical device according to claim 1, wherein:

said advancing element provides a distal pushing force of at least 1500 grams at said distal end of said advancing element.

4. A flexible surgical device according to claim 1, wherein:

said advancing element provides a distal pushing force of at least 2000 grams at said distal end of said advancing element.

5. A flexible surgical device according to claim 1, wherein:

said outer tubular member is a flat wire wound tubular coil.

6. A flexible surgical device according to claim 1, further comprising:

d) an end effector assembly at said distal end of said tubular member; and

e) at least one control wire extending through said tubular member, said control wire having a proximal end coupled to said handle such that operation of said handle causes relative proximal and distal movement of said at least one control wire relative to said outer tubular member, and a distal end coupled to said end effector assembly such that movement of said at least one control wire relative to said outer tubular member causes operation of said end effector.

7. A flexible surgical device according to claim 6, wherein:

when said handle is operated to cause said at least one control wire to be moved proximally relative to said outer tubular member, said at least one control wire goes into tension and places a compressive force on said outer tubular member, thereby

increasing an effective tensile limitation of said outer tubular member.

8. A flexible surgical device according to claim 6, further comprising:

f) an inner sheath extending within the outer tubular member, said sheath including a first lumen for said advancing wire, at least one second lumen for said at least one control wire, said advancing wire extending through said first lumen and said at least one control wire extending through said at least one second lumen.

9. A flexible surgical device according to claim 8, wherein:

said sheath has a non-circular cross-sectional shape.

10. A flexible surgical device according to claim 6, wherein:

said end effector assembly includes a pair of jaws.

11. A flexible surgical device according to claim 10, wherein:

at least one of said pair of jaws is rotatable relative to the other of said pair of jaws.

12. A flexible surgical device according to claim 1, wherein:

said distal end of said advancing element is provided with a structure adapted to push a surgical clip.

13. A flexible surgical device according to claim 1, wherein:

said distal end of said tubular member is provided with a clip chamber adapted to hold a plurality of surgical clips.

14. A flexible surgical device according to claim 1, wherein:

said outer tubular member has an outer diameter not exceeding 3.2 mm.

15. A flexible surgical device according to claim 1, wherein:

said outer tubular member has a length of 150 cm to 250 cm.

16. A flexible surgical device, comprising:

a) a flexible outer tubular member having proximal and distal ends;

b) a flexible advancing element extending through said tubular member and having proximal and distal ends;

c) an end effector assembly at said distal end of said tubular member;

d) at least one control wire extending through said tubular member and having proximal and distal ends, said distal end being coupled to said end effector assembly; and

e) a handle coupled to said proximal ends of said flexible outer tubular member, said flexible advancing element, and said advancing element,

said handle adapted to move said at least one control element proximally relative to said tubular member to apply a compressive force to said tubular member, said compressive force enhancing a tensile limitation of said tubular member, and said handle also adapted to apply a compressive force to said flexible advancing element to move said distal end of said advancing element relative to said distal end of said tubular member.

17. A flexible surgical device, comprising:

a) a flexible outer tubular member having proximal and distal ends;

b) means for enhancing an inherent tensile limitation of said outer tubular member;

c) a flexible advancing element extending through said tubular member and having proximal and distal ends;

d) an end effector assembly at said distal end of said tubular member;

e) at least one control wire extending through said tubular member and having proximal and distal ends, said distal end being coupled to said end effector assembly; and

f) a handle coupled to said proximal ends of said flexible outer tubular member, said flexible advancing element, and said

advancing element, said handle adapted to move said at least one control element proximally relative to said tubular member and to move said advancing element distally relative to said distal end of said tubular member.

18. A flexible surgical device according to claim 17, wherein said outer tubular member is a coil.

19. A flexible surgical device according to claim 17, wherein: said outer tubular member is metal.

20. A flexible surgical clip applier for applying clips over tissue, comprising:

a) a flexible outer tubular member having proximal and distal ends;

b) a flexible clip-advancing wire extending through said tubular member and having proximal and distal ends;

c) a clip pusher at said distal end of said clip-advancing wire;

d) a jaw mount coupled to said distal end of said tubular member;

e) a pair of jaws mounted on said jaw mount, at least one of said pair of jaws being rotatable on said jaw mount relative to the other of said pair of jaws, each of said pair of jaws having a tissue clamping surface, and at least one of said jaws having a clip guide;

f) at least one control wire having proximal and distal ends and extending through said tubular member, said distal end of each said at least one control wire being coupled to at least one of said pair of jaws;

g) a handle assembly coupled to said proximal ends of said tubular member, said clip-advancing wire, and said at least one control wire and adapted

(i) to move said clip-advancing wire relative to said tubular member to move the clip pusher relative to said distal end of said tubular member, and

(ii) to move said at least one control wire relative to said tubular member to effect clamping of said jaws about the tissue and release therefrom; and

h) a clip chamber formed by at least one of said tubular member and said jaw mount adapted to store at least one surgical clip,

wherein when said handle is operated to cause said jaws to be clamped about the tissue and to cause said clip pusher to be forced distally relative to said distal end of said tubular member, sufficient force is provided by said clip pusher to move a clip over the clamped tissue.

21. A flexible surgical clip applier according to claim 20, further comprising:

f) a sheath extending within the outer tubular member, said sheath including a first lumen for said clip-advancing wire, at

least one second lumen for said at least one control wire, said clip-advancing wire extending through said first lumen and said at least one control wire extending through said at least one second lumen.

22. A flexible surgical clip applier according to claim 21, wherein:

said sheath is not fixedly attached to said outer tubular member.

23. A flexible surgical clip applier according to claim 21, wherein:

said sheath has a non-circular cross-sectional shape.

24. A flexible surgical clip applier according to claim 21, wherein:

said sheath is made of a lubricious material.

25. A flexible surgical clip applier according to claim 20, wherein:

said tubular coil is a flat wire wound coil.

26. A flexible surgical clip applier according to claim 25, wherein:

said tubular coil includes a plurality of turns, and said tubular coil is preloaded such that each turn in said tubular coil is substantially in contact with an adjacent turn 360° around the tubular coil.

27. A flexible surgical clip applier according to claim 20, wherein:

said jaw mount includes a rectangular channel in alignment with said at least one clip guide of said jaws and through which a clip may be moved as the clip is advanced into said jaws by said clip pusher.

28. A flexible surgical clip applier according to claim 20, wherein:

one of said jaws of said pair of jaws includes a clip guide and an anvil in alignment with said one clip guide.

29. A flexible surgical clip applier according to claim 28, wherein:

the other of said jaws of said pair of jaws includes a clip guide and a well at a distal end of its clip guide in longitudinal alignment with said anvil of said one of said jaws.

30. A flexible surgical clip applier according to claim 20, wherein:

each of said jaws of said pair of jaws is rotatable about a longitudinal axis through said tubular member.

31. A flexible surgical clip applier according to claim 20, wherein:

said sufficient force is at least 500 grams.

32. A flexible surgical clip applier according to claim 20, wherein:

said sufficient force is at least 1000 grams.

33. A flexible surgical clip applier according to claim 20, wherein:

said sufficient force is at least 1500 grams.

34. A flexible surgical clip applier according to claim 20, wherein:

said sufficient force is at least 2000 grams.